The following listing of the claims will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

1. (Currently Amended) An *in vitro* method for selective electrofusion of a mammalian cell and ~~at least two~~ a fusion partners having a cell-like membranes, comprising:

A) selecting the mammalian cell and the fusion partner;

B) bringing into contact the mammalian cell and the fusion partner[s];

C) providing an electric field using at least one microelectrode, which is of a strength sufficient to obtain fusion of the mammalian cell and the fusion partner, and highly focused on the mammalian cell and the fusion partner[s], wherein said at least one microelectrode is positioned by use of a microscope, at least one micropositioner and/or a stereotactic device, wherein at least one microelectrode is ~~hollow, and~~ sufficiently small to permit the selective fusion of ~~two fusion partners~~ only the mammalian cell and the fusion partner, and the highly focused electric field minimizes the risk for unwanted fusion of surrounding cells.

2. (Currently Amended) A method according to claim 1, wherein only one microelectrode, sufficiently small to permit the selective fusion of ~~two fusion partners~~ the mammalian cell and fusion partner, is used to provide the electrical field in step B.

3. (Currently Amended) A method according to claim 1, wherein two microelectrodes, sufficiently small to permit the selective fusion of ~~two fusion partners~~ the mammalian cell and fusion partner, are used to provide the electrical field in step B.

4. (Previously Presented) A method according to claim 1, wherein one electrode movably mounted on a microchip is used to provide the electrical field in step B.

5. (Previously Presented) A method according to claim 1, wherein several electrodes movably mounted on a microchip are used to provide the electrical field in step B.

6. (Previously Presented) A method according to claim 4, wherein one electrode(s) is (are) movably mounted on a microchip of a suitable design for combinatorial synthesis of fusion products.

7. (Cancelled)

8. (Currently Amended) A method according to claim 2, wherein at least one microelectrode that is hollow, electrolyte-filled, and sufficiently small to permit the selective fusion of ~~two fusion partners~~ the mammalian cell and fusion partner, is used to provide the electrical field in step B, and said microelectrode is also used to deliver fusion partners or chemical agents by electroendoosmosis, electrophoresis, or by Poiseuille flow.

9. (Currently Amended) A method according to claim 2, wherein the outer diameter of said electrode(s) is sufficiently small to permit the selective fusion of ~~said at least two fusion partners~~ the mammalian cell and fusion partner without affecting nearby structures, such as cells, liposomes, and proteoliposomes.

10. (Original) A method according to claim 9, wherein the outer diameter of said electrode(s) is 1-100 μm.

11. (Currently Amended) A method according to claim 2, wherein at least one electrode is used, for delivery of ~~at least one fusion partner~~ the mammalian cell or fusion partner to the fusion site.

12. (Previously Presented) A method according to claim 2, wherein step A is performed by use of the electrodes.

13. (Previously Presented) A method according to claim 1, wherein step A is performed by use of optical trapping.

14. (Previously Presented) A method according to claim 1, wherein step A is performed by use of micropipettes.

15. (Currently Amended) A method according to claim 1, wherein ~~at least one of the fusion partners is a cell, and~~ the ~~other~~ fusion partner[(s)] ~~independently~~ is ~~(are)~~ selected from the group consisting of a single cell, a liposome, a proteoliposome, a synthetic vesicle, an egg cell, and an enucleated egg cell~~, and a sperm cell at any development stage and a plant protoplast~~.

16. (Cancelled)

17. (Currently Amended) A method according to claim 1, wherein the mammalian cell or the fusion partner[s] ~~are~~ is provided in a buffer prior to step B.

18. (Currently Amended) A method according to claim 1, wherein at least one of the mammalian cell or the fusion partner[s] has been immobilized prior to step A.

19. (Currently Amended) A method according to claim 1, wherein one of the mammalian cell or fusion partner[s] is part of a cellular network.

20. (Currently Amended) A method according to claim 1, wherein at least one of the mammalian cell or fusion partner[s] has been electroporated in a buffer prior to step A.

21. (Currently Amended) A method according to claim 1, wherein at least one of the mammalian cell or fusion partner[s] has been exposed to a dielectrophoretic field in a buffer prior to step A.

22. (Currently Amended) A method according to claim 1, wherein at least one of the mammalian cell or fusion partner[s] has been treated by a fusogenic or other agent that promotes close cell-cell contacts.

23. (Cancelled)

24. (Cancelled)

25. (Previously Presented) A method for creation of hybridomas comprising using the method according to claim 1.

26. (Previously Presented) A method for manipulation of the composition of a cellular membrane comprising using the method according to claim 1.

27. (Previously Presented) A method for the delivery of a well-defined volume of a substance to a cell comprising using the method according to claim 1.

28. (Previously Presented) A method for the delivery of a pharmaceutically active substance to a cell comprising using the method according to claim 1.

29. (Cancelled)

30. (Cancelled)

31. (Previously Presented) A method according to claim 2, wherein one electrode movably mounted on a microchip is used to provide the electrical field in step B.

32. (Previously Presented) A method according to claim 3, wherein several electrodes movably mounted on a microchip are used to provide the electrical field in step B.

33. (Previously Presented) A method according to claim 5, wherein one electrode(s) is (are) movably mounted on a microchip of a suitable design for combinatorial synthesis of fusion products.

34. (Cancelled)

35. (Previously Presented) The method of claim 1, wherein the *in vitro* method is an *ex vivo* procedure.

36. (New) The method of claim 1, wherein said mammalian cell is a tumor cell.

37. (New) The method of claim 1, wherein said mammalian cell and said fusion partner are not a sperm cell.

38. (New) An *in vitro* method for selective electrofusion of a target cell and a fusion partner, comprising:

A) selecting the target cell and the fusion partner, wherein both the target cell and fusion partner are selected from the group consisting of a single mammalian cell, a liposome, a proteoliposome and a synthetic vesicle;

B) bringing into contact the mammalian cell and the fusion partner;

C) providing an electric field using at least one microelectrode, which is of a strength sufficient to obtain fusion of the target cell and the fusion partner, and highly focused on the target cell and the fusion partner, wherein said at least one microelectrode is positioned by use of a microscope, at least one micropositioner and/or a stereotactic device, wherein at least one microelectrode is sufficiently small to permit the selective fusion of the target cell and the fusion partner, and the highly focused electric field minimizes the risk for unwanted fusion of surrounding cells.